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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/067,295 | 02/07/2002 | Akira Jinzaki | 826.1789 | 7086 |
| 21171 | 7590 | 04/11/2006 | EXAMINER | |
| STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005 | | | HO, DUC CHI | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2616 | |

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,295

Applicant(s)

JINZAKI, AKIRA

Examiner

Duc C. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 11, 18, 19, 21, 22 and 24 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9, 10, 12-17, 20 and 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Drawings

1. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

2. The indicated allowability of claims 3-5, 8, 11, 18-19, and 22 are withdrawn in view of the newly discovered reference(s) to Minami. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by the Admitted Prior Art (APA) in figure 5 of the instant application, hereinafter referred to as APA.

Regarding claim 1, the APA of the instant application in figure 5 discloses an information transmission server 501 for broadcasting communication.

a transmission unit (a NIC 505-fig.5) generating a packet for each receiver based on information about a receiver provided by the processor (the NIC transmits a packet for each receiver based on the transmission request of each receiver from receiver management, see page 3-line 20 to page 4-line 8) through an input/output bus (the I/O bus 504) and transmission data (a data preparation of the unit 502-fig.5), and transmitting the packet to a connected network (a connected network via the NIC 505), in response to an instruction issued by said processor of said information processing device (in response to an instruction inherently issued by the CPU 502 of the transmission server 501); and

a unit (a buffer memory 503) connecting said transmission unit to the processor of said information processing device through the input/output bus.

Regarding claim 2, the APA in figure 5 discloses a plurality of NICs, wherein each NIC inherently received different information for transmission from the processor 502 via the I/O bus 501.

Regarding claim 21, this claim has similar limitations as claim 1. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 1.

Regarding claim 24, this claim has similar limitations as claim 1. Therefore, it is rejected under the APA for the same reasons set forth in the rejection of claim 1.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-5, 8, 11, 18-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art (APA) in figure 5 of the instant application, in view of Minami et al. (US 2003/0165160).

Regarding claim 18, the APA discloses in figure 5 a NIC 505. The NIC typically includes a control unit for managing receiving information (corresponding to a receiver information management unit), a buffer for storing transmission data (corresponding to buffer), and a transmitting circuit for transmitting packet that is scheduled for delivery to destination (corresponding to a packet unit), and a scheduler unit for scheduling the time for packet transmission.

The APA, however, does not expressly teach a transmission schedule including a transmission order.

One skill in the art would recognize the advantage of having a transmission scheduler including a transmission order so that a packet may be transmitted at a

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specific order associated with information to be broadcasted to destination, thereby improving the efficiency of a network card.

Minami discloses gigabit Ethernet adapter. Figure 33 discloses a transmit module comprising a scheduler 3350, and a FIFO 3348, see 0387-0392.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the APA in figure 5 with the transmit module of Minami.

The suggestion/motivation for doing so would have been to transmit packet at a specific order associated with information to be broadcasted to destination, thereby improving the efficiency of a network card.

Therefore, it would have been obvious to combine the APA of fig. 5 of the instant application with Minami to obtain the invention as specified in claim 18.

Regarding claim 19, the buffer of the NIC 505-fig. 5 of the APA is capable of obtaining transmission data without receiving transmission data from the processor 502.

Regarding claim 3, this claim has similar limitations as claims 1, and 18. Therefore, it is ejected under the APA-Minami for the same reasons set forth in the rejection of claims 1, and 18.

Regarding claim 4, the buffer of the NIC 505-fig. 5 of the APA is capable of obtaining transmission data without receiving transmission data from the processor 502.

Regarding claim 5, the APA in figure 5 discloses a plurality of NICs, wherein each NIC inherently received different information for transmission from the processor 502 via the I/O bus 501.

Regarding claim 8, the APA in figure 5 should teach a header of a packet containing the information about a receiver or a destination for transferring the packet to the destination.

Regarding claim 11, the buffer unit in the NIC505-fig. 5 of the APA is used for storing routing information and header information for the transmitted packet.

Regarding claim 22, the APA discloses all claimed limitations, except the network adapter transmits a packet for a specified receiver according to a transmission schedule including a transmission order and timing of the packet.

One skill in the art would recognize the advantage of having a transmission scheduler including a transmission order and timing of the packet so that a packet may be transmitted at a specific order with its associated timing for broadcasting to destination, thereby improving the efficiency of a information processing device.

Minami discloses gigabit Ethernet adapter. Figure 33 discloses a transmit module comprising a scheduler 3350, and a FIFO 3348, see 0387-0392.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the APA in figure 5 with the transmit module of Minami.

The suggestion/motivation for doing so would have been to transmit packet at a specific order with its associated timing for broadcasting to destination, thereby improving the efficiency of a information processing device

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Therefore, it would have been obvious to combine the APA of fig. 5 of the instant application with Minami to obtain the invention as specified in claim 22.

Allowable Subject Matter

7. Claims 6-7, 9-10, 12-17, 20, and 23 are objected to as being independent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Ho whose telephone number is (571) 272-3147. The examiner can normally be reached on Monday through Friday from 7:00 am to 3:30 pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patent Examiner



Duc Ho

04-04-06